



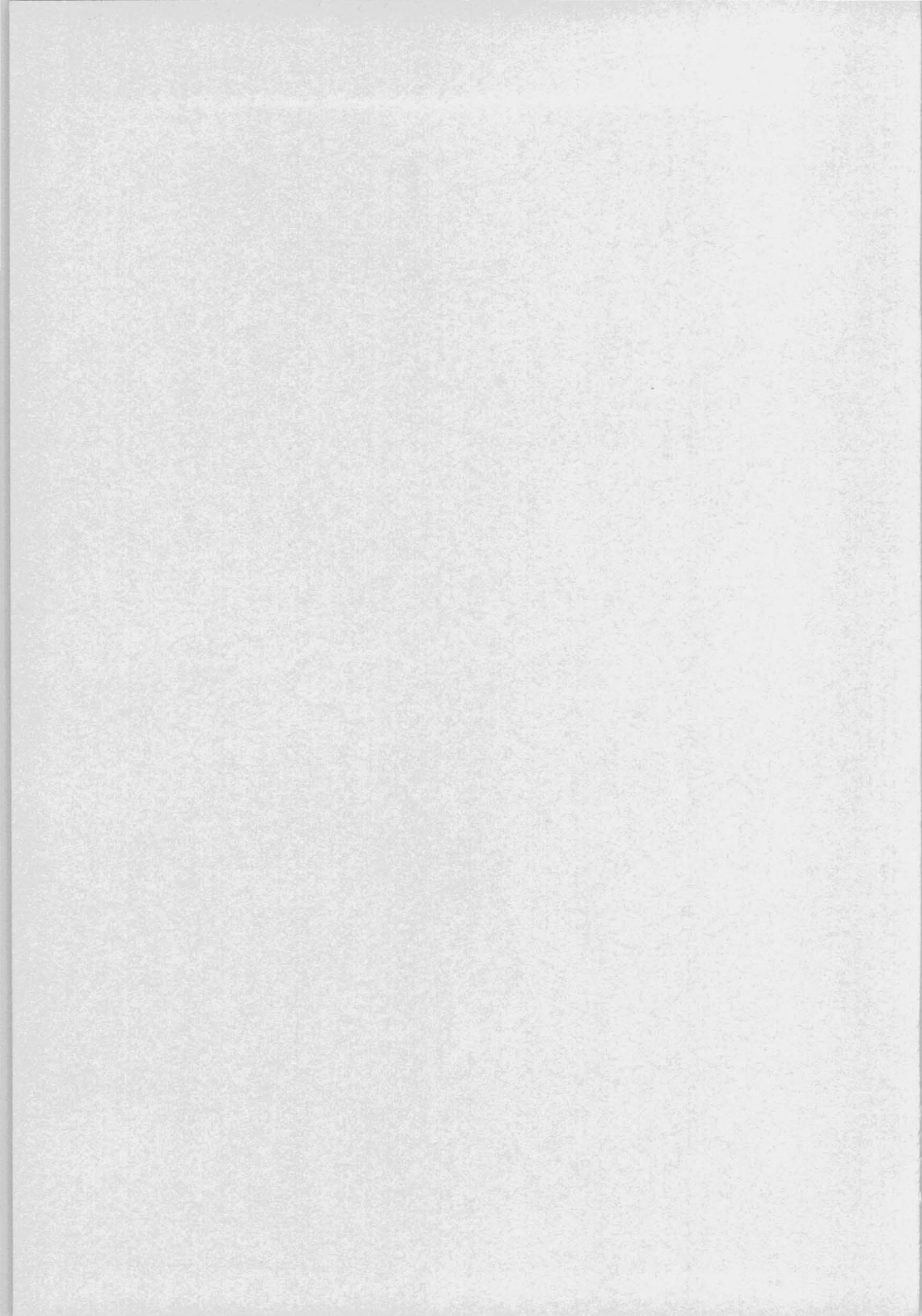
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**THE LABOUR FORCE PARTICIPATION AND
ECONOMIC WELL-BEING OF OLDER MEN
IN LONDON, 1929-31**

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The labour force participation and economic well-being of older men in London, 1929-31.¹

Permanent withdrawal from the labour force at older ages after several decades of more-or-less full-time employment has become commonplace in industrialised economies. In Britain, for example, fewer than 10 per cent of men aged 65 and over are currently active in the labour force compared with about 75 per cent in 1881, when the participation of older persons was first recorded in the census. But it is likely that the reasons why older workers withdraw from the labour force have changed radically in the last 100 years. In the late twentieth century, retirement, for the majority, is seen as a matter of individual choice, as an example of the greater leisure that can be purchased as income rises. Hannah has noted that 'voluntary retirement is, in a sense, a luxury good whose incidence would be expected to grow in a hundred year period in which general living standards have perhaps tripled.'²

It is doubtful that withdrawal from the labour force was a matter of choice for the majority of the population before the later twentieth century. Voluntary retirement implies that an individual can enjoy an acceptable standard of living without working - i.e where the loss in income is discounted by the increase in leisure. In turn, this implies the possession of a pension or financial assets. We know, however, that prior to the Second World War, the bulk of the British population owned few assets. The mean value of aggregate household savings rates was only 4.4 per cent in the period 1880-1914, and 5.1 per cent for 1920-39, most of which was attributable to middle-class households.³ Boyer has recently estimated that typical working-class household assets in the 1860s were sufficient to sustain subsistence for just 4-8 weeks,⁴ and Johnson has argued, largely from aggregate data, that 'the net savings rate for working-class households before the Second World War was very low, and certainly not sufficient to sustain a lengthening period of retirement.'⁵

Beliefs that old age was dysfunctional were widely held in Britain before the First World War. In the 1890s, trade unionists such as Alfred Jephcott argued that 'because of the great stress of work as we arrive towards old age, the difficulty of men as they emerge towards old age is increasing year by year in their effort to get employment.'⁶ It was the recognition of this difficulty that led several craft unions to establish independent superannuation funds in the 1880s and 1890s.⁷ The problems faced by older workers in obtaining and keeping a job induced a number of social reformers from across the political spectrum, including Charles Booth and Joseph Chamberlain, to campaign for the introduction of public old age pensions.⁸ When old age pensions were finally introduced for persons aged 70 and above in 1908, they were means-tested and non-contributory. The implication was that by this age, most people were incapable of paid work and had exhausted any savings that they had been able to make. When contributory pensions for persons aged 65 and above were introduced in 1928 as part of the national insurance system, this appeared to be a tacit acceptance that the market could not provide adequate financial resources for aged manual workers.

Similar views about the position of older workers were being expressed in the United States. Progressive Era reformers developed a critique of factory production (as opposed to agriculture) because of the way the former seemed to degrade older industrial workers and consign them to an industrial scrap heap.⁹ Abraham Epstein, a strong advocate of old age pensions, believed that modern industry 'replaces and discards these aged wage-earners as it is in the habit of replacing and discarding the worn-out and inefficient machinery.'¹⁰ Such arguments underpinned much of the political and administrative discussion of economic and social security in the United States in the 1920s and 1930s, and provided a key argument for the introduction of old age pensions, leading to the Social Security Act of 1935.¹¹

Some recent research suggests that this pessimistic account of the economic conditions

and prospects of older people in the United States before the Second World War is at variance with the underlying economic realities of the time. A number of studies have emphasised the high aggregate savings rates in the USA, the substantial asset holdings, and the high rates of residential property ownership among older American workers suggesting that a significant proportion of older Americans could reasonably expect voluntarily to retire and sustain themselves.¹² Ransom and Sutch found that the proportion of older males recorded in the US census with a gainful occupation and not unemployed was low and stable in the period 1870-1937 at about two-thirds of all men aged 60 and above.¹³ These census data also show that the mean age of retirement was higher for industrial workers than it was for farm and non-farm self employment, thus casting doubt on the idea that the origins of retirement were a consequence of industrialisation.¹⁴ And both individual and household income data, derived from a number of US budget surveys between 1890 and 1949 further challenge the pessimistic view of old age. Gratton concluded that the budget data indicate that 'most older people in the early twentieth century fared relatively well by the standards of the time, that the economic well-being of the elderly improved during this period, and that younger people expected to achieve economic security in old age.'¹⁵

[Figure 1 about here]

The optimistic reassessments of the economic status of older Americans in the past pose a conundrum. Figure 1 shows that the withdrawal of older workers from the labour force has evolved in a rather similar way in different countries over the course of the twentieth century.¹⁶ The similarity of these trends has widely been interpreted as evidence for a common 'logic of industrialism' across the advanced economies which operated to force older people out of employment.¹⁷ The social and economic needs generated by this aspect of industrialisation can then be portrayed as a primary explanation for the introduction of similar public pension

programmes in most industrial countries.¹⁸ But if the new interpretations about the employment and income security of older people in America are correct, one of two conclusions follow. Either, the pessimistic readings of the economic circumstances of older people in the major European economies are incorrect and need to be revised to reflect an economic reality similar to that now found by recent American studies, or, the similarity of the national retirement trends, which we observe in Figure 1, are not caused by the same underlying processes. In turn, this would cast doubt on the idea that retirement trends were driven by the process of industrialisation.

The paper will examine the employment and economic circumstances of older men in inter-war Britain. The paper uses information on the income and employment status of older men derived from a newly-computerised survey of 26,915 metropolitan households that was carried out in 1929-32 for the *New Survey of London Life and Labour* (hereafter NSLLL). The first part of the paper reviews census and other data relating to the income and employment of older men in inter-war Britain. Section II describes the household data, identifies the strengths and weaknesses of this source for this study of retirement, and develops a number of testable hypotheses about the supply of older male workers. The following four sections examine the participation, earnings, other income and housing assets of our London sample. This analysis shows that there were clear differences between the economic experience of older workers in Britain and the US. The paper concludes by speculating how these findings may relate to broader historical debates about the causes and consequences of falling participation rates for older men.

I

Figure 2 shows the labour force participation rate for men aged 65 and above in England

and Wales. In 1881, the first census year in which retired people were explicitly excluded from the enumeration of the occupied population, almost three quarters of the older men reported that they were occupied. By 1971 only 19.3 per cent of men aged 65 reported that they were economically active.

The decline in the participation rate of older workers from 1881 does not imply that the fall was the same in different sectors of the economy.¹⁹ In late-Victorian Britain, older workers were disproportionately concentrated in agriculture, and some of the reported decline in overall participation rates was a consequence of the contraction in agriculture, as opposed to a decline in the participation rates of older industrial workers. In 1881, just over 15 per cent of the male workforce was employed in agriculture. This had fallen to 8.6 per cent by 1931 and just over 4 per cent by 1971. In Figure 2 the observed participation rates have been adjusted to take account of this structural change. The 'agriculture-adjusted' line shows the participation rates for older males that would have existed if in each census year the agricultural and non-agricultural employment shares had been those that pertained in 1971 (4.06 per cent agriculture, 95.94 per cent agriculture). The 'all sectors-adjusted' data take this procedure one stage further. It adjusts for other sectoral changes, including the relative growth of the tertiary sector, by imposing the share of employment in each of the 27 occupational sectors in 1971 on the employment data for each census from 1881 to 1951.²⁰

[Figure 2 about here]

When the data are adjusted in this way, they indicate that the incidence of retirement in the economy would have been virtually constant between 1881 and 1921 in the absence of structural change. In the non-agricultural sector, the participation rate for men aged 65 and above remained relatively low and stable in the period, at around 56 per cent. The trend and the level of the adjusted participation rates of older workers for England and Wales are similar to the pattern

found by Conrad when he carried out similar adjustments for Germany, France and the USA.²¹

Inferences about individual behaviour that are derived from aggregate census data must necessarily be tentative. In order to conduct direct tests of the inter-relationship between income, assets and labour force participation, detailed information on households and individuals is required. Until very recently, such data have not been available in Britain for any period before the Second World War.²² The newly available data from the NSLLL allow us to investigate the relationship between labour force participation and household income and assets directly. This promises a more precise analysis of the labour supply decisions of older men in inter-war Britain.

II

The *New Survey of London Life and Labour* was the largest and most comprehensive social survey undertaken in Britain before the Second World War.²³ The survey was designed to follow up the pioneering investigations undertaken by Charles Booth in the late 1880s. The primary purpose of both surveys was to estimate the extent of poverty in London and its causes.²⁴ The NSLLL involved a detailed house to house enquiry taken in 1929-32, during which information was collected on 28,100 working class households containing 98,400 individuals of which data concerning 26,915 households and 94,137 individuals has survived.²⁵ This was about 2 per cent of the working class population in 38 London boroughs. Considerable care was taken to obtain the maximum amount of information from each household in the sample. Information was collected on the demographic structure of each household and the occupation, income, earnings and birthplace of each member. This included the name of the employer and the cost of the journey to work. In addition, the cards contain detailed and comprehensive information on housing conditions.

Very little of the NSLLL household data was analysed by the original team.²⁶ All the social surveys of the time shared a low ratio of analysis to data, since, in a world without computers, only a limited number of tabulations were possible. The NSLLL is unique, however, in that it is the only British survey before the Second World War that survives (almost) in its entirety: the original household survey cards are held in the British Library of Political and Economic Science - the LSE library - and they have now been fully computerised.²⁷

The NSLLL data have to be used with care. Only working class households, as defined by the occupation of the main wage earner, were included. Households within the sampling frame where the main earner was found not to be working class were ignored. In the NSLLL, the household was defined effectively as all persons living at one address. Persons defined as 'spinster' or 'widow' were included and there was only one 'head', even in a three generation family.²⁸ Earnings in the NSLLL were attributed to individuals but other income was attributed to the household as a whole. We have excluded all lodgers from our definition of the household, although the rent (net of costs) paid by lodgers is included as part of the income of the household at that address. The NSLLL distinguished 'earners' (i.e. the 'employed' population) from 'non-earners'. Those 'earners' with actual earnings were asked to state their earnings in the previous week and also their earnings in a 'full week'. The latter incorporated a concept of 'normal' earnings and was designed to capture casual earnings. There is some ambiguity in the interpretation of the concept of 'normal' earnings, and in this study we use data only on actual earnings in the previous week. Non-earned household income, such as pensions, rent, unemployment and Poor Law benefits also appear to have been detailed in full.

There are some problems with age reporting. In the main, this is a consequence of digit preference rather than age bias. The number of respondents giving their age as 60, 70 or 80 was high relative to those who gave their age as 59, 61 etc. This problem may be circumvented by

constructing five year averages centred on age 60, 65, 70 etc. Note that age mis-reporting cannot mis-identify those in receipt of pensions, which were paid from ages 65 and 70, since the NSLLL gives direct evidence of pension benefits.

Finally, the sample excluded the population living in institutions. This was 0.3 per cent of the total population, but 6 per cent of those aged over 65.²⁹ In common with those in receipt of outdoor relief, these were likely to be amongst the poorest people in the population. Those living in Poor Law institutions, for example, had virtually no assets, by definition.

The data contained in the NSLLL allow us to test several of the hypotheses which are raised in the literature concerning the retirement of older workers. We define retirement as the ability of older people to live without either working or being destitute. If retirement in London was a consequence of choice, we would expect a significant number of non-working older persons to have been either in receipt of a pension, or to have owned other assets, or to have been in receipt of substantial transfers from other family members. Furthermore, we would expect the income of non-working older persons to have been high relative to the population average, while the income of those still in the workforce should have been relatively low, since it was their low financial resources which prevented retirement.

III

The 1931 census reported 47.5 per cent of men in England and Wales aged 65 and above to have an occupation. This figure can be compared with data from the NSLLL, but the limits to this comparison must be noted. First, age-specific occupational data of adults were reported only at the national level in the 1931 census. The participation rate in London may have differed from the national rate because of regional differences in either the overall occupational structure

or in the age-specific propensity to work. Secondly, the census relied on self-declaration of occupational status, and this may inflate the apparent degree of economic activity among older people. It is probable that some older men who were no longer in employment and who would not work again reported themselves as having an occupation, since at the time of the census they had not accepted that their non-employed status was permanent.

We can address some of these issues directly. The potential effect of regional differences in occupational structure can be estimated by assuming that the proportion of elderly to total workers in each occupational sector was the same in London as at the national level. This allows us to derive from the census, age-specific participation rates for London in 1931 which take account of the fact that the occupational structure of London was significantly different from that of England and Wales. This procedure introduces a minor downward adjustment to estimated age-specific participation rates in London, as is shown in Table 1.

The effect of the misreporting of occupational status may be examined directly using the NSLLL data. The survey allowed respondents to select one of seven different employment states: 'not in labour force'; 'employed'; 'self-employed'; 'unemployed'; 'sick/incapacitated'; 'on strike'; 'unknown/other'. The survey collected information on earnings in the previous week, which allows us to identify those men who, regardless of their declared occupational status, had zero earnings in the survey period. In Table 1 we report two NSLLL participation rates for each age group: the proportion with earnings, which we take to be a lower bound estimate of participation, and the proportion with any reported employment status except 'not in labour force', which we take to be an upper-bound estimate, and similar to the census definition of occupation.

[Table 1 around here]

Table 1 shows that NSLLL participation rates for older men are consistently below census estimates. It is possible that this is because the NSLLL significantly under counted older workers, but in other respects the survey seems to fit closely with census data. The participation rate reported for prime age males (21-64) in England and Wales in the 1931 census was 96.7 per cent. Of the more than 20,000 NSLLL males in this age range, 98.3 per cent reported themselves to be in the labour force. This confirms that the NSLLL concept of being in the labour force matches closely the census definition of 'occupied'. The proportion of NSLLL prime age males reported to be in receipt of earnings during the previous week was, however, considerably lower, at 87.0 per cent. The gap between the upper and lower-bound NSLLL estimates of the participation rate of males aged 21-64 is almost identical to that for males aged 65+, indicating that the upper and lower bound estimates for the older population are plausible. We conclude, therefore, that the NSLLL reveals a significantly lower level of labour force participation for older male workers in London than in the rest of the country. In order to determine whether this low participation rate resulted from particularly high levels of income and wealth among older Londoners or from poor employment opportunities we must examine the financial information available in the NSLLL.

IV

The average earnings of men in the NSLLL sample declined with age. Table 2 shows that a 5-year average of male earnings peaked at 722d per week at age 37, and fell to just 71d per week at age 75. The primary reason for this decline is, of course, the decline with age in the proportion of men who were in receipt of earnings. If we exclude from the sample all men who had received no earnings in the previous week, then peak earnings of 787d were achieved at age

41, and although earnings still declined with age, earners aged 75 received 502d, which is more than 60 per cent of the peak age-specific average male weekly wage.

In addition to data on earnings, the NSLLL collected information on hours worked by each person. This allows us to determine whether the age-related decline in average earnings per active worker was a consequence of changes in the length of the average working week, or in the average hourly rate of pay, or both. If the average wage rate declined with age, then this can be taken as evidence of 'on the job' retirement as workers moved from more to less demanding, lower skill jobs. If, on the other hand, the wage was constant but the average working week declined, then this is indicative of stable skill levels, but of declining capacity or effort. The third and fourth columns in Table 3 demonstrate that for older London men who continued to be active in the labour force, there was an insignificant relationship between wage rates and age ($r = 0.08$), but a strong negative relationship between hours worked and age ($r = -0.69$). This result indicates that there was very limited scope for on-the-job retirement in the metropolitan labour market in 1930.

A further indication of the limited employment opportunities for older men is revealed in the final two columns of Table 2. The sharp decline with age in the proportion of earners in the male population was matched by an increase in the proportion of earners in self-employment. At all ages, self-employed men in the NSLLL worked for significantly fewer hours per week than employees (32.0 compared with 45.3 hours at age 40, 34.8 compared with 43.2 hours at age 65). Hence, the increase in the self-employment rate with age indicates an inability or unwillingness on the part of many older workers to sustain their work effort over a full working week.

[Table 2 around here]

We can conduct a partial test of whether the probability of receiving earnings was a function of need or desire. We know that the probability of individual males having earnings

declined with age, but factors other than age are likely to affect labour force participation. Two that we can consider explicitly, using NSLL data, are the earnings of other members of the household, and the housing tenure of the household in which each adult male is located. If participation was a response to need, we would expect the probability of being active in the labour force to be negatively related to the earnings of other household members, since the earnings of different household members are likely to be substitutes, although imperfect ones. Similar reasoning suggests that men living in owner-occupied houses, and thus in possession of a significant capital asset, would have less need to earn. Table 3 reports a probit analysis of these relationships, in which the probability of being in receipt of non-zero earnings is regressed on age, age-squared, the earnings of other household members, and a measure of housing tenure which takes the value of 1 for owner-occupiers and 0 for all other tenures.

[Table 3 around here]

For males aged 21-59 the coefficients on the age variables in the probit analysis are consistent with the probability of being in receipt of non-zero earnings rising to a peak of 92.1 per cent at age 38 and then declining slightly. For males aged 60+ there is confirmation of a strong negative relationship between age and propensity to earn. There is no significant relationship between earnings and owner occupation for either age group, but there is an interesting difference by age in the impact of the earnings of other household members. For males aged 21-59 the probability of having non-zero earnings fell as other household earnings rose, indicating that there existed a small but statistically significant degree of substitutability between the earnings of different household members, and suggesting that adult males in these households exercised some degree of choice over whether to participate in the labour market. For males aged 60+, the probability of being in receipt of earnings is not significantly affected by the level of other household earnings. This suggests either that older workers were perversely

insensitive to income/leisure trade-offs or that their total household income was so low that they adopted any strategy that maximised household income. In order to examine these propositions we need to look in more detail at all sources of household income.

V

Earnings represent just one of a number of potential sources of total household income. The NSLL data allow us to examine the relative importance of own earnings, other household earnings, and non-earned income, for all households headed by older men. The head of household was not always directly identified on the original survey cards, and we have adopted a conservative approach by attributing headship only to persons identified as 'head' or 'husband'. This gives us 23,706 heads out of a total of 26,915 households. Missing data on age of head (some were recorded simply as 'A' or 'Adult' or 'Full'), and exclusion of female headed households reduces the useable number of male-headed households to 18,176. Figure 3 shows, for all male-headed households, the relative contribution of household heads, other earners, and non-earned income to total household income, by age of household head.

[Figure 3 about here]

Figure 3 shows that the earnings of the head peaked at age 35, but total household income peaked for heads aged 55, primarily because of the additional earnings of other household members. From age 55 household income declined continuously to age 85. The rapid fall in heads' earnings, and slightly less rapid fall in other household earnings, was only partially compensated for an increase in other sources of household income.³⁰ From the discussion of earnings in section IV above it is clear that the fall in heads' earnings at older ages was driven mainly by the decline in the participation rate. If we examine only those households in which the head remained in receipt of earnings (Figure 4) we find a much more modest decline in total household income from age 55. A comparison of Figures 3 and 4 confirms the finding of the

probit analysis that, for heads aged 65 and above, the earnings of other household members were a complement to, rather than a substitute for, heads' earnings, although other household income was clearly a partial substitute for heads' earnings.³¹

[Figure 4 about here]

The NSLLL data on source of household income can be used to make a direct comparison with some of the US data that have been used to support the contention that most older people in the early twentieth century enjoyed comparatively high living standards. Gratton and Rotondo examined data on the source of labour income of a largely working class sample of American households collected in 1917-1919.³² The data were based on earnings in nine industries and, hence, excluded non-earners. In the US sample the total income of households headed by males aged 40-44 was distributed between own earnings, other household earnings and other income in the ratio 87:5:8. For male heads aged 60 plus the ratio was 60:30:10. The second column of Table 4 shows that these ratios are comparable with NSLLL data for male heads with earnings. We have already seen, however, that the proportion of male heads with earnings in the NSLLL declined sharply with age. Column 3 of Table 4 reports the income ratios for all male heads - i.e. it includes those with no earnings. This reduces the average share of household income provided by heads aged 60 and above from 58 to 39 per cent. If we include non-heads (i.e. counting all males aged 60 plus) this further reduces the contribution of own earnings to 36 per cent. The NSLLL data provide no support for the view that older men were the main contributors to household income. Nor is it likely that relatively high incomes made it possible for any significant number to finance retirement. Households headed by men in their late 50s (the peak income) had about 60 per cent of the household income of equivalent households in the USA in 1917-19.³³ Moreover, the NSLLL data indicate that, because participation rates decline sharply with age, it is not possible to provide a comprehensive or

representative picture of the economic status of all elderly headed households or of all older people from data derived from earnings or labour force surveys.

[Table 4 around here]

The humped shaped household income profiles shown in Figures 3 and 4 take no account of household size and are driven in part by differences in household size by age of head. We have used the OECD needs index to equalise households. The index gives a weight of 1.0 to the first adult, 0.7 to other adults, and 0.5 to children under 18.³⁴ Figure 5 shows equivalised household income by age of head as a proportion of mean equivalised household income for all 18,176 male headed households (with or without earnings). This shows that heads aged between 20 and 40 lived, on average, in households with an equivalised income marginally below the average. From age 45, equivalised income rose above the average to reach a peak in the late 50s, when it was 15 per cent above the average. From this point, however, equivalised income fell steadily with age, so that older household heads could expect equivalised income to fall to the working-class average in their late 60s, and to be substantially below average thereafter. It is clear from a comparison of Figures 3 and 5 that the decline in equivalised income from age 60 is driven by the steady fall in average earnings of the head of household.

[Figure 5 around here]

Income from sources other than earnings provided only limited replacement of earned income for these older households. The NSLLL recorded nineteen separate sources of other income, but for most of these sources the number of elderly households receiving income was negligible. Table 5 reports the number of households headed by elderly men in receipt of other income from the six most common sources, together with the average weekly sum received by all elderly households distinguishing those who had income in each category. It is clear that only pensions and rental income make a significant contribution to the average income of the 1528

elderly households, although the four other sources provided significant sums for the small number of households that received this type of income. Rental income from letting a room appears to have complemented rather than substituted for pension income, with a correlation between these two sources of income of 0.21, whereas the other sources of unearned income are negatively correlated, but with insignificant coefficients below -0.07. There is, therefore, little indication that these elderly households engaged in deliberate 'income-packaging', i.e. that they set up a combination of complementary sources of unearned income, in order to sustain themselves in retirement.

[Table 5 around here]

VI

Table 5 shows that the majority of elderly headed households were in receipt of pension income. This income can be viewed as a return to the (non-fungible) wealth embodied in state pension entitlements which was the most important asset held by British workers in the period. State pension entitlements could have two important effects on retirement behaviour and retirement savings. First, the entitlement to a pension at some age could affect labour force participation and/or earnings; and, secondly, the expectation of a pension in the future could affect the acquisition of assets.

In 1930 a person aged 70 was entitled to a non-contributory pension of 10/- (120d) per week, subject to a means test. The rules, which were last changed in 1924, stated that a full pension was paid if total income did not exceed £65.25 per annum, of which only £26.25 could be earned income. The pension was reduced *pari passu* above that point. This meant, in effect, that for those aged 70 and above there was no point in earning between 10/- and £1 per week. In fact about 97 per cent of those in receipt of this pension received it in full.³⁵ There was also

a contributory pension scheme, which was introduced in 1928. This also paid 10/- a week, but from age 65 and it was not means tested.³⁶

The impact of these pensions on the behaviour of older men in the NSLLL sample does not appear to have been large. As Table 2 shows, there is no evidence that hourly wage rates or hours worked by men over 70 were reduced to avoid the income threshold of the means-tested pension. To test for a participation effect we fitted a cubic of age to the age-specific participation rate for men aged 60 to 75. The fit is good ($R^2=0.97$) and there is no significant impact on participation at either 65 or 70; the residuals lie within the standard error bands for all ages except 74. We find it unsurprising that older men did not rush to leave employment once they became eligible for a pension, since pensions were paid at a level well below contemporary estimates of the poverty line. The maximum public pension income for a single and a two person household was only 56 per cent and 86 per cent respectively of Rowntree's estimate of the appropriate minimum poverty line income.³⁷

It is, of course, possible that the expectation of a pension at 65 or 70 reduced the desire of younger men to accumulate assets. We cannot test this proposition directly since the NSLLL does not contain information on financial assets, but we note that Johnson found that the introduction of the means-tested old age pension in 1908 increased rather than reduced working class savings.³⁸ The NSLLL does, however, contain information on tenure, distinguishing (among other things) rented accommodation from owner occupation.³⁹ Only 4.3 per cent of the 18,176 males who headed households in the NSLLL survey were owner-occupiers.⁴⁰ Not surprisingly, ownership rates rose with age, from 2 per cent at age 30 to 5.7 per cent at 50 reaching a maximum of 7.9 per cent at age 75. These rates seem plausible for a working-class metropolitan population; it has been estimated that about 10 per cent of all homes in Britain were owner-occupied before the First World War, and there was little change in these ownership rates

until the introduction of more flexible and cheaper mortgages in the mid-1930s. The low ownership rates in the NSLLL can be contrasted with high rates in the US. Haines and Goodman report urban ownership rates of more than 20 per cent for 30 year olds in the 1930 US census, rising to over 60 per cent for 70 year olds.⁴¹ These US data are consistent with high levels of deliberate asset accumulation over the life course, whereas the NSLLL data demonstrates that the accumulation of real estate was a strategy adopted by a very small minority of adult males in inter-war London.

VII

Our analysis of the NSLLL data demonstrates that the income of older workers declined rapidly. Those older men who lived comparatively well were those who continued to be employed, while those who had 'retired' were relatively poor. We also note that, taking older men as a whole, own income declined faster, and from an earlier age, than appears to be the case for an equivalent group of US workers analysed by Gratton and Rotondo. We believe some of this difference can be attributed to the selection bias inherent in the US labour survey data which, by definition, excludes non-earning elderly-headed households. The consideration of only those older men with earnings exaggerates the income of older men, and hence their ability to finance retirement.

It is possible, of course, that older workers made a rational choice to give up work, fully or partially, and to accept a low standard of living. We think this unlikely. Working class incomes in London in this period were low. The highest household incomes in the 1930 NSLLL sample were only about 60 per cent of the income of equivalent households in the U.S.A in 1917-19, for example. Moreover, we note that equivalised household income in the NSLLL sample peaked for households headed by men in their late 50s at 15 per cent above the mean, and then declined continuously with age to reach only 69 per cent of the mean for men aged 80. This

age related decline in household income was driven by the declining employment propensities of older men. Data on wage rates and hours worked indicate that there was little flexibility in the metropolitan labour market for older workers who wished to downgrade their labour to a lower-paid job, or to a significantly shorter working week.

Public pensions were the most important single source of income for non-employed elderly households, but there is no evidence that access to these pensions at 65 and 70 significantly reduced labour supply. These pensions were inadequate, on their own, to maintain income close to or above contemporary estimates of the poverty line. In addition, we have shown that the proportion of working-class Londoners who owned their own house was very low by American standards. We think it unlikely that older men in London would have willingly subjected themselves to such low relative incomes in the absence of significant asset ownership.

The NSLLL data indicate that the economic circumstances of older workers in inter-war Britain were significantly different from those of American urban industrial workers. There is little sign of the 'relatively high standards of economic well-being for the majority of the elderly' found by Gratton for older males in the US.⁴² This suggests that 'retirement' in working class London in the main still occurred through necessity rather than choice and that the similar labour force participation trends shown in Figure 1 have different underlying causes.

Table 1
Alternative estimates of participation rates of older men
 (%)

	65+	65-69	70-74	75+
1931 Census, England and Wales	47.5	64.9	41.7	22.8
1931 Census, adjusted to London sectoral shares	46.3	62.0	41.2	22.8
NSLLL with earnings	27.8	42.6	21.6	8.1
NSLLL in labour force	38.3	57.6	30.1	12.6
Number of NSLLL men in age group	1859	819	621	419

Source: NSLLL dataset; Johnson (1994); Lee (1979).

Table 2

Earnings by age of NSLLL males (5-year average)

	[1] Average earnings of all males (pence per week)	[2] Average earnings of earners (pence per week)	[3] Average hours worked per week	[4] Average wage rate (pence per hour)	[5] Earners as % all males	[6] Self- employed as % earners
Peak age	age 37= 722	age 41= 787	age 35= 45.3	age 45=17.0	age 38=92.1	age 38 =6.6
60	551	729	43.9	16.0	76.2	9.6
65	367	661	41.4	15.7	55.8	13.7
70	158	555	35.0	14.2	28.2	20.8
75	71	502	31.1	15.2	15.1	32.1

Note: earnings are given in old pence, i.e. 240d = £1.

Table 3
Probit of probability of receiving non-zero earnings

	males 21-59			males 60+		
	Coeff	Prob	mean	Coeff	prob	mean
age	.0962	.00	37.85	-.3481	.00	67.6
age ²	-.0013	.00	1548.0	.0016	.02	4604.6
other earn	-.0001	.00	373.95	.0001	.30	329.0
owner	.0075	.89	.042	-.1226	.22	.069
constant	-.4201	.01		15.71	.00	
N	19288			2943		
Mean of dependent variable	.8793			.4495		
Log-likelihood	-6991.7			-1648.4		
Chi ²	228.6			753.0		

Note: Prob shows the probability of the estimated coefficient being 0.

Table 4

Male earnings, other household earnings and other household income, as percentage of total household income, US and NSLLL samples

	[1] US 1917-19	[2] NSLLL (a)	[3] NSLLL (b)	[4] NSLLL (c)
Age 40-44				
own earnings	87	78	74	78
other earnings	5	18	20	16
other household income	8	4	6	7
Age 60+				
own earnings	60	58	39	36
other earnings	30	33	37	40
other household income	10	9	24	24

Notes

US: only male household heads with earnings

NSLLL (a): only male household heads with earnings

NSLLL (b): all male household heads

NSLLL (c): all males

Sources

Gratton & Rotondo, 'Industrialisation', pp. 343-348; NSLLL files.

Table 5**Sources of unearned income for households with male heads aged 65+**

	Number of households (n=1528)	Average amount; all elderly households (pence per week)	Average amount for households receiving this source (pence per week)
Pensions	1151	172	228
Rent	444	60	207
Poor relief	124	13	101
Allowances from relatives	50	5	166
Unemployment insurance benefits	32	6	280
Health insurance benefits	23	2	145

Source: NSLLL files

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NOTES

1. We are indebted to the other members of the New Survey of London project, Tim Hatton, Roy Bailey (University of Essex), Angela Raspin (LSE) and particularly to Anna Leith (LSE). Earlier versions of this paper were presented at conferences at the Fondation des Treilles in Provence and the University Pompeu Fabra in Barcelona and at the Cambridge Group for the History of Population and Social Structure. We are grateful for criticism offered on these occasions.
2. Hannah, *Inventing*, p. 124.
3. The household saving rate is estimated as the annual change in the stock of household encashable assets as a proportion of income from employment. Data are taken from Sheppard, *Financial institutions*, pp. 18-19; Feinstein, *National income*, tab. 1.
4. Boyer, 'Poor relief', p. 68.
5. Johnson, 'Employment', p. 122.
6. *R.C. Aged Poor* (P.P. 1895, XIV) q. 14571. Jephcott was a prominent engineering union and friendly society member.
7. Fukasawa, 'Voluntary provision', Appendix 1.
8. Specific pension proposals were advanced by Booth and Chamberlain and were investigated by the Royal Commission on the Aged Poor in 1895, but were rejected on the grounds that they were too costly, would undermine the independence of respectable working men, and would harm the self-help activities of friendly societies and trade unions.
9. Weiler, 'Scrap heap'.
10. Quoted in Gratton, 'Poverty', p. 39.
11. Haber and Gratton, *Old age*.
12. Gratton and Rotondo, 'Industrialization', Gratton, 'Poverty', Haines and Goodman, 'Home', Ransom and Sutch, 'Impact', Ransom, Sutch and Williamson, 'Inventing', Costa, 'Pensions', Carter and Sutch, 'Myth'.
13. Ransom and Sutch, 'Labor'.
14. Carter and Sutch, 'Myth', p. 27.
15. Gratton, 'Poverty', p. 57.
16. Conrad, 'Naissance de la retraite', Fig. 1, p.557.
17. Quadagno, *Aging*, p. 150; Kohli, 'World'; Phillipson, *Capitalism*, pp. 16-38; Macnicol, 'Old age', Jacobs et al, 'Evolution'.

18. Wilensky, *Welfare state*, Williamson and Pampel, *Old age*.
19. It is, of course, quite possible that the retirement rate was declining before 1881, but systematic evidence is not available.
20. See Johnson, 'Employment', pp. 116-118, for further details of this adjustment procedure.
21. Conrad, 'Naissance', p.557.
22. The British census has never collected information concerning income. Moreover, the '100 year rule' means that the most recent manuscript census available to the researcher is that of 1891.
23. Llewellyn-Smith, *New survey*.
24. Booth, *Life and labour*. The development of the social survey is discussed in Bulmer, Bales & Sklar, *Social survey*.
25. The cards for the outer London boroughs of Walthamstow and Tottenham, although used for the published volumes have been lost.
26. The sample data were referred to in only two of the nine published volumes and then only in aggregated form.
27. The project was undertaken by a team at the LSE and the University of Essex. It was supported by ESRC Grants R000235697 and R000221981, by the Nuffield Foundation and the *Suntory-Toyota Centre for Economics and Related Disciplines*, at the LSE. The entire content of each card has been computerised and additional coding of occupations, birthplaces and location of employer has been undertaken. Full details, of the project, including the quality of the sample, are given in Baines, *Computerisation of the NSLLL*.
28. Despite instructions to the contrary, the oldest married man or widower was usually designated as head which gives some advantage for the purposes of this paper.
29. Gordon, 'Familial support', pp. 292-3.
30. We have assumed, in effect, that an older man living in a multi-generation household received an appropriate share of the income. It seems unlikely that they would have received a dis-proportionately large share.
31. It is possible that the limited extent of contributions by other family members may be related to the fact that the majority of older men lived in independent households. Of the 1813 household containing men aged over 65, 63 per cent contained one or two persons.
32. Gratton & Rotondo, 'Industrialization', pp. 343-8.
33. i.e. \$900 cf \$1400, assuming a purchasing power parity exchange rate of £1 = \$4.00.
34. Falkingham and Hills, *Dynamic*, p. 101.

35. Rowntree, *Old people*, p. 79.

36. There were 2,069,080 persons holding basic pensions in the U.K. in 1930. Of this number, 967,991 held non-contributory pensions which were means tested, of which 26,697 (2.6%) were not paid in full. Under the Act which came in force in 1928, the contributory pension was only paid from age 65-69 when the non-contributory pension began to operate. In this case, the latter was not means tested. In 1930, 644,080 persons held contributory pensions under this act and a further 457,909 aged 70 and over. *Statistical Abstract*, pp. 86-89.

37. Rowntree, *Poverty and progress*, p. 502.

38. Johnson, 'Self help'. Johnson has also estimated, from aggregate data, that the mean level of working class financial assets, in savings bank deposits, life insurance etc., held by each working class adult in 1931 was about £32.50. Johnson, *Saving & spending*, p. 205. This amount would provide an annuity of about £3.75 a year, assuming life expectancy of 11.4 years at 65 (Case, 1960) and interest rates of 2%.

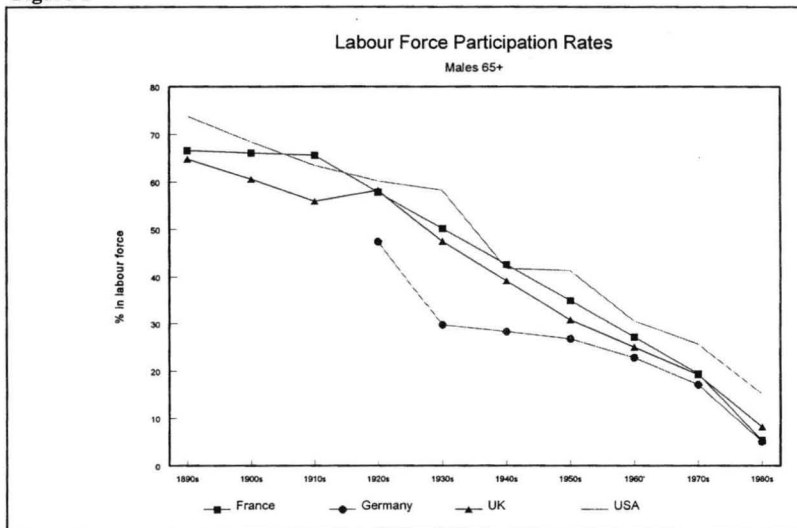
39. A small number of households enjoyed rent free accommodation, which is an asset. We did not consider free accommodation as equivalent to owner occupation, however, since the security of tenure is unknown.

40. 1240 men lived in owner-occupied properties - i.e. 449 men living in owner occupied properties were not the household head.

41. Haines & Goodman, 'A home of one's own', p. 209.

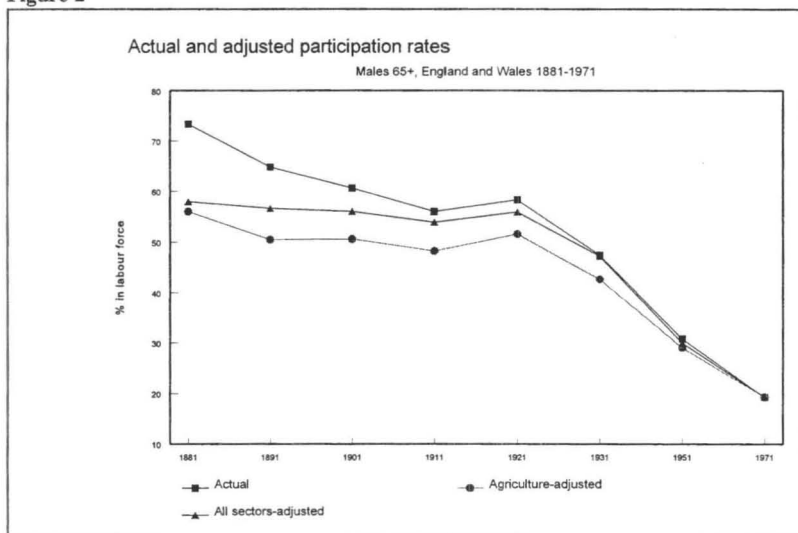
42. Gratton, 'Poverty', p. 56.

Figure 1



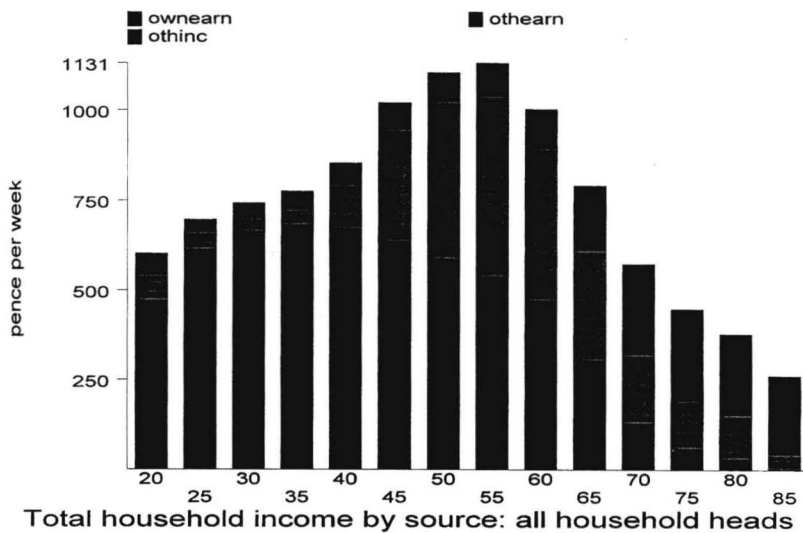
Source: Johnson and Falkingham, *Ageing*, pp. 88-91.

Figure 2



Source: Johnson, 'Employment', table 2.

FIGURE 3



STATISTICAL

FIGURE 4

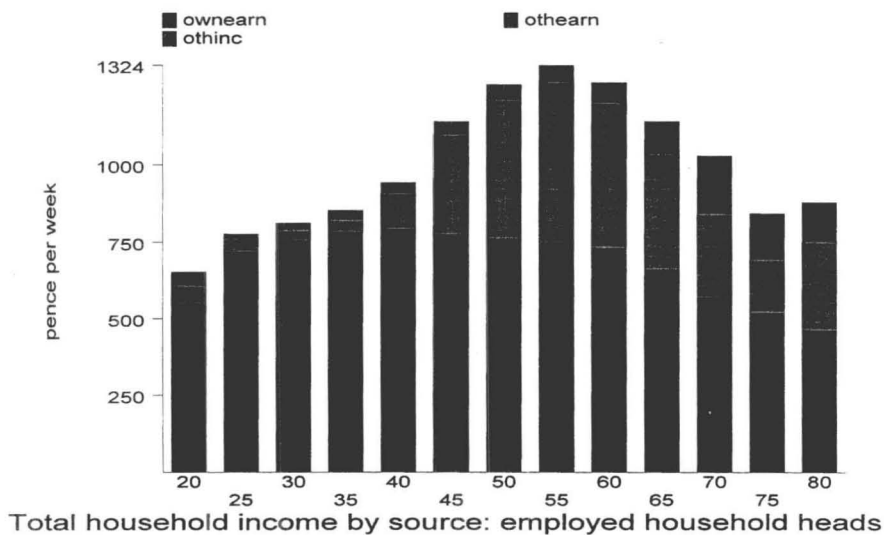
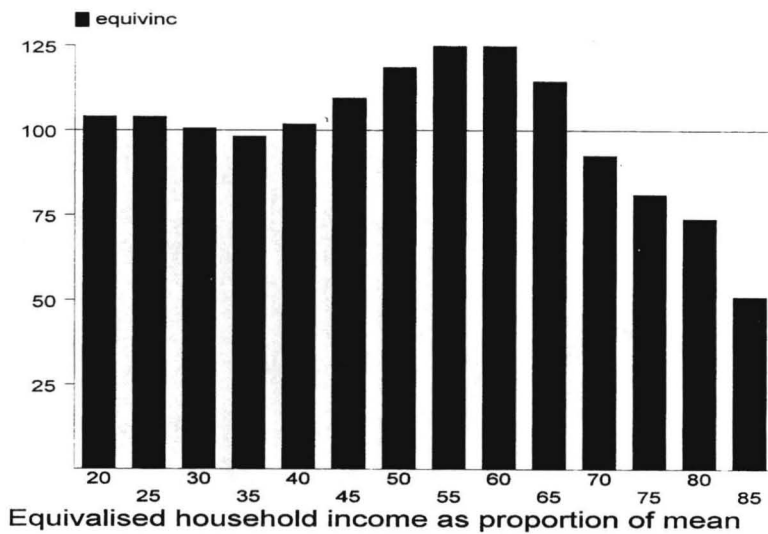


FIGURE 5



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